

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (original) A graphite-containing heat-resistant cast iron comprising 3.5-5.6% of Si and 1.2-15% of W on a weight basis, and having intermediate layers, in which W and Si are concentrated, in the boundaries of graphite particles and a matrix.
2. (original): The heat-resistant cast iron according to claim 1, wherein a ratio ( $X_i/X_m$ ) of the weight ratio  $X_i$  of W in said intermediate layers to the weight ratio  $X_m$  of W in said matrix is 5 or more.
3. (currently amended): The heat-resistant cast iron according to ~~claim 1 or 2~~claim 1, wherein a ratio ( $Y_i/Y_m$ ) of the weight ratio  $Y_i$  of Si in said intermediate layers to the weight ratio  $Y_m$  of Si in said matrix is 1.5 or more.
4. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-3~~claim 1, having a composition comprising, on a weight basis, 1.5-4.5% of C, 3.5-5.6% of Si, 3% or less of Mn, 1.2-15% of W, less than 0.5% of Ni, 0.3% or less of Cr, and 1.0% or less of a graphite-spheroidizing element, the balance being substantially Fe and inevitable impurities.
5. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-4~~claim 1, further comprising 0.003-0.02% by weight of S and 0.05% or less by weight of a rare earth element.
6. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-5~~claim 1, comprising 0.005-0.2% by weight of Mg as a graphite-spheroidizing element.

7. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-6~~claim 1, wherein it meets  $Si + (2/7) W \leq 8$  on a weight basis.
8. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-7~~claim 1, further comprising 5.5% or less by weight of Mo.
9. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-8~~claim 1, further comprising 6.5% or less by weight of Cu.
10. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-9~~claim 1, further comprising 5% or less by weight of Co.
11. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-10~~claim 1, further comprising 1.0% or less by weight of Nb and/or 0.05% or less by weight of B.
12. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-11~~claim 1, wherein the number of graphite particles having W-containing carbide particles in the boundaries with said matrix is 75% or more of the total number of graphite particles.
13. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-12~~claim 1, wherein with respect to W-containing carbide particles on the surface of graphite particles exposed by etching, their number is  $3 \times 10^5/\text{mm}^2$  or more per a unit area of graphite, and/or their area ratio is 1.8% or more.
14. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-13~~claim 1, wherein its  $A_{C1}$  transformation point is 840°C or higher when measured from 30°C at a temperature-elevating speed of 3°C/minute.

15. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-14~~, wherein its weight loss by oxidation is  $60 \text{ mg/cm}^2$  or less when kept at  $800^\circ\text{C}$  for 200 hours in the air.
16. (currently amended): The heat-resistant cast iron according to ~~any one of claims 1-15~~claim 1, wherein its thermal cracking life is 780 cycles or more in a thermal fatigue test, in which heating and cooling are conducted under the conditions of an upper-limit temperature of  $840^\circ\text{C}$ , a temperature amplitude of  $690^\circ\text{C}$  and a constraint ratio of 0.25.
17. (currently amended): An exhaust equipment member made of the heat-resistant cast iron recited in ~~any one of claims 1-16~~claim 1.
18. (original): The exhaust equipment member according to claim 17, wherein it is an exhaust manifold, a turbocharger housing, an exhaust manifold integral with a turbocharger housing, a catalyst case, an exhaust manifold integral with a catalyst case, or an exhaust outlet.
19. (original): An exhaust equipment member used at temperatures exceeding  $800^\circ\text{C}$ , which is formed by a heat-resistant cast iron having a composition comprising, on a weight basis, 1.5-4.5% of C, 3.5-5.6% of Si, 3% or less of Mn, 1.2-15% of W, less than 0.5% of Ni, 0.3% or less of Cr, and 1.0% or less of a graphite-spheroidizing element,  $\text{Si} + (2/7) \text{W} \leq 8$ , and the balance being substantially Fe and inevitable impurities, said heat-resistant cast iron having a structure comprising a matrix based on a ferrite phase in an as-cast state, in which graphite is crystallized, and intermediate layers, in which W and Si are concentrated, in the boundaries of said graphite particles and said matrix, whereby it has an  $A_{C1}$  transformation point of  $840^\circ\text{C}$  or higher when measured from  $30^\circ\text{C}$  at a temperature-elevating speed of  $3^\circ\text{C/minute}$ , and a thermal cracking life of 780 cycles or more in a thermal fatigue test, in which heating and cooling are

conducted under the conditions of an upper-limit temperature of 840°C, a temperature amplitude of 690°C and a constraint ratio of 0.25.

20. (original): The exhaust equipment member according to claim 19, wherein a ratio ( $X_i/X_m$ ) of the weight ratio  $X_i$  of W in said intermediate layers to the weight ratio  $X_m$  of W in said matrix is 5 or more.

21. (original): The exhaust equipment member according to claim 20, wherein said  $X_i/X_m$  is 10 or more.

22. (currently amended): The exhaust equipment member according to ~~any one of claims 19-21~~ claim 1, wherein a ratio ( $Y_i/Y_m$ ) of the weight ratio  $Y_i$  of Si in said intermediate layers to the weight ratio  $Y_m$  of Si in said matrix is 1.5 or more.

23. (original): The exhaust equipment member according to claim 22, wherein said  $Y_i/Y_m$  is 2.0 or more.

24. (currently amended): The exhaust equipment member according to ~~any one of claims 19-23~~ claim 19, wherein its weight loss by oxidation is 60 mg/cm<sup>2</sup> or less when kept at 800°C for 200 hours in the air.

25. (currently amended): The exhaust equipment member according to ~~any one of claims 19-24~~ claim 19, wherein said heat-resistant cast iron has a composition comprising, on a weight basis, 1.8-4.2% of C, 3.8-5.3% of Si, 1.5% or less of Mn, 1.5-10% of W, 0.3% or less of Ni, 0.3% or less of Cr, and 0.01-0.2% of a graphite-spheroidizing element,  $Si + (2/7) W \leq 8$ , and the balance being substantially Fe and inevitable impurities.